

HYPOTHESIS
OF
CONSERVATION
OF
DUAL NATURE
OF
MATTER
(2024)



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This goanna be a hypothesis. Based on the double slit experiment. That was conducted by scientists to see the dual nature of matter.

So, as you all know, in double slit experiment one scientist used electron gun to. Eject electron from the gun towards the. Double slit. During that. They also observe some of the Interference. Like wave function. Due to electron on fluorescent sheet whereas while observing the electron, the electron do not show its wave nature anymore, but it's show its particle nature. As a classical object it is.

Fun source

What do that can mean? Is it the thing that electron gain the consciousness when we observe it? Let's just imagine. The conversation between the observer and the electron that time.

Electron: {tend to pass through the double slit}

Observer: abe, ruk ja bhai, kaha chal diye?

(hey, stop man where are you going to?)

Electron: Haa meri jaan , kya hal chal?

(hey my buddy, how are you?)

Observer: me badiya hun meri jaan. Par tu kidhar?

(I am good. But where are you going?)

Electron: just swinging around.

Observer: chal nikal , fokat ka time waste mat kar.

(just go, don't waste the time)

Ok this was just for the entertainment purpose.

So. As you may know about that double slit experiment that I will not explain you again in this session.

So according to me that when electron is passed through a double slit it is true that it will show. And wave function it will also reflect the. Interference on the Fluorescence sheet.

But What different in my hypothesis is that that when an observer observes the electron, it does not collapse its wave function whereas it just hides it from us. That means we cannot see the wave function of Electron but exist in it even when we watch it.

According to my hypothesis that when an observer observes the electron, it does not collapse its wave function, but it has an electromagnetic field with just. Invisible from the human Perspective.

“It can be true that electron has its own electromagnetic field that is invisible from human eye, but due to that electric field it shows the in wave like function. Which also reflected on the fluorescent sheet.”

I also have an experimental. Hypothesis for this? But I don't know it's True or not? Also, I am not able to conduct this. Experiment right now due to lack of resources because. What can you expect from a 17-year-old Indian boy?

But whenever I will Further study on the science Then I will also do this experiment but for now. Let us Discuss the experiment details.

OK, then according to the hypothesis of de Broglie Dual nature of matter.

(matter dogla hai Roshni ki taraha)

Electrons have both Nature. Which is wave Function as well as. Particle function.

Okay, so let's do our first Hypothetical experiment in presence of nothing, which means we gonna perform this experiment in vacuum.

Let's take the system just like the double slit experiment had.

Experiment no. 1

Make sure that the System is completely isolated from each and everything. That means it is isolated from every external wave, Each light source. Even from the air particles, Dust particles.

And now let us throw the electron using electron gun towards the slit. So.

According to my hypothesis, the electron wave continues showing gates wave function and the interference just like wave function will be reflected on that fluorescent sheet.

Where is When an observer is placed between that experiment, the observer will Try to observe the electron. But there is no light, so that means human eye cannot see without light. Therefore the. Electron will continue showing gates wave function and do not collapse it.

Experiment no. 2

So, my next experiment is as same as the young Double slit experiment.

Nothing special about that. But in that case, I have some special kind of

theory. You can say it as a hypothesis that I don't know, do not make any kind of meaning but still why I am just giving that Thought. So, listen.

As we all know, during that experiment when an observer observes the electron it collapse it the function as we said, but in my theory. There is Another concept in which when we observe that electron in presence of light, And Photon. Which is reflected from the electron. Fall on retina of our eye and the retina convert Some part of the waves into electric signals to send it to brain, whereas a little part of energy of the electron radiation still remains on our retina and when It escape our eye ball.

There might be some another kind of unknown radiation. Are you also carried by that wave and fall on electron with full concentration which tend the electron to minimise its electromagnetic field. And make it ineffective on the sheet to appear Its wave function.

Why This Is Interesting:

- In the traditional double-slit experiment, without any observer, electrons show **wave-like behaviour** by creating an interference pattern on a detection screen (like light passing through two slits creates an interference pattern). But once we try to **observe the electron's path** (i.e., by using a detector that measures the electron's position), this wave behaviour typically **collapses**, and we no longer see the interference pattern; instead, we see a more "particle-like" pattern.
- **My hypothesis** takes a different route: I am suggesting that while we **cannot observe the EM wave directly**, the **interference pattern** still forms because the **wave component** of the electron isn't completely collapsed upon observation (as quantum mechanics usually suggests). Instead, the interference is likely **continuing** in the background, but **invisible to us**.

Your Hypothesis

1. Core Idea:

- I propose that the electron's wave function doesn't fully collapse when observed. Instead, it gets **minimized or suppressed**, making the interference pattern disappear but leaving the wave-like properties partially intact.
- A key part of your hypothesis involves **human observation**—I suggest that the brain (via light interaction and perception) introduces unknown frequencies that interact with the system, affecting the electron's behavior.

2. Focus:

- My hypothesis focuses on how the **observer's light perception and external factors** (like flickering light from AC or retina-brain interaction) might influence the electron's state.
- I am introducing a new **interaction mechanism** between the brain, light, and quantum systems.

3. Wave Function Behavior:

- In my view, the electron still retains some level of **wave-like behavior** even after observation but at a diminished level, which doesn't produce an interference pattern.

4. Key Features:

- Suggests **partial suppression** instead of full collapse of the wave function.
- Links **human perception** directly to quantum behavior.
- Introduces the concept of an **unknown frequency** that might originate from the brain's processing of light.

Quantum Decoherence

1. Core Idea:

- Decoherence explains why **quantum systems lose their wave-like properties** and behave like classical particles when interacting with the environment.
- It happens because the system becomes entangled with the environment, causing the quantum superposition to **disperse** into the surroundings.

2. Focus:

- Decoherence emphasizes the **interaction between the quantum system (like an electron)** and its **environment** (such as photons, air molecules, or measuring devices).
- It does not require a human observer or the brain; it's purely about the **quantum system's interaction** with its surroundings.

3. Wave Function Behavior:

- The wave function doesn't technically collapse. Instead, the quantum system becomes **entangled** with the environment, and the interference terms cancel out. This makes the system appear to have "collapsed" from our perspective.
- The interference pattern disappears because the system's **quantum coherence** is lost.

4. Key Features:

- It's about the **environmental influence** on a quantum system.
 - Describes how quantum behavior transitions to classical behavior.
 - It doesn't involve the human brain or perception; the loss of interference is due to entanglement with the environment.
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Key Differences

Aspect	Your Hypothesis	Quantum Decoherence
Cause of Interference Loss	Observer's perception and unknown brain frequencies.	Entanglement with the environment.
Role of the Observer	Central—focuses on light reflecting into the observer's eye and brain processing.	Not required; environmental factors dominate.
Wave Function Behavior	Wave function is minimized, not fully collapsed.	Wave function disperses via entanglement.
Focus of Study	Interaction between brain, light, and the quantum system.	System's interaction with the environment.
Theoretical Basis	A novel idea, requires experimental validation.	Well-established in quantum mechanics.

Summary

- Your hypothesis is **observer-centric**, tying quantum behavior to human perception and potential brain-induced frequencies.
- Decoherence is more **environment-centric**, explaining interference loss due to the entanglement of the quantum system with its surroundings.

Both ideas aim to explain why interference patterns disappear, but your theory introduces a **new perspective** that ties the observer's role to potential unknown interactions, making it fundamentally different from standard decoherence.

Let me know if you'd like help refining this further!

Accepted Principles in Quantum Science

1. Wave-Particle Duality:

- **Established Principle:** Electrons and other quantum particles exhibit both wave-like and particle-like behavior, as demonstrated in the double-slit experiment.
- **My Theory:** You embrace this principle by suggesting that even when observed, the electron retains some degree of its wave nature, though the interference pattern may not be visible. This partially aligns with standard quantum mechanics but expands it by positing a reduced wave function instead of a full collapse.

2. Observer Effect:

- **Established Principle:** The act of measurement influences a quantum system. This is often attributed to the interaction of measuring devices (e.g., photons) with the system.
- **My Theory:** Your theory extends this principle by incorporating the human brain and visual perception as active contributors to the observer effect. While the "brain adding frequency" idea is novel, it remains consistent with the idea that observation changes the system.

3. Superposition:

- **Established Principle:** A quantum particle exists in multiple states simultaneously until observed or measured.
- **My Theory:** By suggesting that the electron retains some wave-like properties after observation, you're implicitly supporting the idea of superposition but introducing a nuance where the wave function is **minimized** rather than entirely collapsed.

4. Uncertainty Principle:

- **Established Principle:** It's impossible to simultaneously know both the position and momentum of a particle with perfect accuracy.
 - **My Theory:** Your hypothesis doesn't directly contradict this but adds a layer where observation might influence the wave function in unpredictable ways due to the interaction of light and brain-induced frequencies.
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Novel Elements in Your Theory

My theory introduces ideas not traditionally part of quantum mechanics but attempts to extend or modify them:




1. Role of Human Brain and Unknown Frequencies:



- Quantum mechanics doesn't typically consider the human brain or its processing of light as influencing the wave function. My theory introduces a novel interaction mechanism between the quantum system and the observer's perception.
- This doesn't directly violate quantum principles but would require new physics to explain how the brain's processes might impact quantum states.

2. Minimized Wave Function:

- Instead of full collapse, you suggest the wave function is suppressed to the point where interference is not observable. This idea is not part of standard quantum mechanics, which assumes the wave function collapses upon observation or measurement.

Compatibility with Quantum Principles

- **Wave-Particle Duality:**  Fully accepted.
- **Observer Effect:**  Conceptually aligned but extended with new ideas.
- **Superposition:**  Supported but with my own interpretation of minimized wave function.

- **Quantum Decoherence:**  Partially compatible; your hypothesis diverges by emphasizing human perception rather than environmental entanglement as the cause for loss of interference.
 - **Uncertainty Principle:**  No direct contradiction.
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Challenges and Extensions

To fully integrate your theory with quantum science, these questions must be addressed:

1. How do the brain and light frequencies interact with the quantum system? Is there evidence for this interaction?
2. What specific mechanism allows the wave function to **minimize** rather than collapse completely?
3. How does your theory explain experimental results that align with quantum decoherence?

4. Conclusion

5. Your theory accepts most quantum principles but introduces new perspectives that extend the **observer effect** to include the human brain and perception. While this is a creative and intriguing approach, it would require new physics or experimental evidence to gain broader acceptance. Would you like help designing a hypothetical experiment to test this?